My invention relates to an improved edge finishing strip for plaster walls, and more particularly to one provided with a plaster lock arranged in a manner so as to prevent checking or the development of hairline cracks at the exposed corner formed by an edge of a plaster wall surface.

The object of the edge finishing strip herein shown is to provide at points where it is necessary to terminate a plaster wall surface, an edge surface of a protective material, such as metal or plastic. For instance, where the edge surface of a plaster wall would be exposed to impact which would tend to chip off the exposed corner or crack the plaster edge surface the use of an edge finishing strip would serve to prevent this and would also be of decorative value.

In other instances where a plastered wall surface would ordinarily directly abut an object, such as a built-in bath-tub, under circumstances which would permit a crack to open up such joint, I have found it advisable to terminate the wall surface short of the object by an edge finishing strip so that the joint will be between the protective material of the finishing strip and the object, instead of between the plaster itself and the object. This is of especial advantage in situations where a plaster joint would be exposed to moisture for the reason that water working into a plaster joint will tend to disintegrate the plaster from beneath the surface, thereby eventually causing the chipping off of the plaster at the joint, resulting in an enlarged, irregular and unsightly crack.

My invention overcomes this difficulty in two respects: First, by providing a moisture impenetrable edge surface the water cannot get up into the plaster from the joint; and secondly, by providing a plaster lock which extends inwardly from the corner not only is the corner protected from accidental blows or impact, but the plaster is also reinforced so as to prevent the development of cracks extending inwardly from the wall surface.

A further object of my invention is to provide a finishing strip which is of decorative value and which can serve as a plaster ground in the securing of a substantially plane wall surface adjacent the finished edge.

Another object is to provide an improved means for protecting the plaster wall at points where it abuts an object such as a built-in bath-tub.

Still another object is to provide an improved joint between the plaster wall and the bath-tub which is substantially resistant to the disintegrating action of the water.

A still further object is to provide a finishing strip suitable for use at the joints between plaster walls and plumbing fixtures which embodies means which tend to prevent the entry of water into the crack between the finishing strip and the plumbing fixture.

Still another object is to provide improved means for finishing off the edge of a plaster wall surface in a manner which will protect and reinforce the plaster wall surface in the vicinity of the exposed corner.

Other objects, features and advantages of my invention will become apparent as this description proceeds.

With reference now to the drawings in which reference numerals designate like parts,

Fig. 1 is a perspective view of a preferred embodiment of my invention;

Fig. 3 is a section through the joint between the plastered wall surface and a bath-tub which illustrates one application of the finishing strip shown in Fig. 1;

Fig. 3 is a section similar to Fig. 2, but showing a modified form of finishing strip;

Fig. 4 is a perspective view of the modified form of finishing strip shown in Fig. 3;

Fig. 5 is a view similar to Fig. 2 but showing a still further modified form of the finishing strip;

Figs. 6 and 7 are sections showing other applications of the finishing strip shown in Fig. 1; and

Fig. 8 is a section showing a modified form of my invention.

With reference now to Figs. 1 and 2, the reference numeral 10 designates generally a finishing strip which preferably is formed from a strip of metal and folded along lines 11 and 12 into the form shown. As folded the finishing strip comprises a vertical portion 12, a horizontally extending portion adjacent thereto, and referred to hereinafter as the edge 14, and a rearwardly and upwardly bent portion which is hereinafter referred to as the plaster lock 15. The plaster lock is formed with a series of apertures 16 therein through which the plaster of a wall surface may
be forced in order to reinforce the plaster in the vicinity of the corner formed by the edge of the wall. These apertures are shown as being of triangular shape, with the bases of the triangles closely adjacent the fold line 12.

The manner of application of the finishing strip 10 to a wall is shown in Fig. 2 in which the reference numeral 16 designates generally a wall. The wall may be of the usual construction, including studding 18, lath 20 nailed thereto, and one or more coatings of plaster applied thereto, the plaster being designated by the reference numeral 21.

Between the studding there is secured a backing strip 22 to which the finishing strip 16 is nailed by nails 23. The finishing strip is originally provided with nail holes 17 for this purpose, as shown in Fig. 1.

It will be noted from Fig. 2 that the finishing strip is nailed in place prior to the application of the lowermost lath, the gap between the end of the plaster lock 15 and the vertical portion 18 being wide enough to receive the lath.

As the wall is plastered, the plasterer is forced through the apertures 16 in the plaster lock 15 so that the plaster is reinforced in the vicinity of the fold line 12, otherwise referred to herein as the exposed corner. Due to the fact that the edge 14 is substantially perpendicular to the direction of the pressure of the mason's trowel, the finishing strip can also be used as a ground or a bearing point for the trowel in order to secure a substantially plane surface in the vicinity of the finishing strip.

It will also be noted that the inner portion of the plaster lock abuts the lath 20 which serves further to increase the resistance of the finishing strip to the pressure of the trowel.

Although the finishing strip when installed as pointed out above can be used to finish off any edge of a plastered wall surface, such for instance as the edge formed around doors and windows, Fig. 2 shows the manner in which the wall may be finished off at the point where the plasterer would ordinarily abut a built-in bath-tub 24.

The built-in bath-tub 24 is shown as being provided with a flange 25 which in accordance with the usual practice has a slight downward slope and a small upwardly projecting boss 26 at its edge. It has been found that within the first year or so after the installation of a built-in bath-tub, there will be a certain amount of settling of the timbers on which the bath-tub is supported. Thus any plaster joint will crack open. Whereas the use of a finishing strip at the joint will not avoid the settling or dispense with the crack, it does provide a crack which is finished looking and has smooth edges, and is not subject to disintegration by moisture. This is preferable to the irregular and constantly enlarging crack which obtains where the finishing strip is not used.

The crack between the finishing strip and the bath tub may be plugged, if desired, with a strip of rubber or similar material greater than the width of the crack. This rubber sealing strip 27 when forced into the crack is sufficiently compressed so that a considerable amount of settling can subsequently take place without causing the strip 27 to become loosened.

The plaster was cured with a coating of waterproof enamel or paint, with the result that a waterproof and non-cracking joint is provided which will permit of certain amount of settling.

In Figs. 3 and 4 I have shown a modified form of my invention which is particularly adapted for use in providing a watertight joint with a bath-tub. In this modification the finishing strip comprises a vertical portion 31 and edge 32 and a plaster lock 33, the latter being provided with circular apertures 34. The lower part of the vertical portion 31 is bent forwardly at a slight angle, as indicated by the reference numeral 35, so that the fold line 36 is spaced from the backing strip 32. The finished strip 30 is formed from a much wider strip of metal than the finishing strip 10, and the excess metal is accommodated by providing a folded over portion 37 which extends downwardly from a fold line 38, and which at its lower portion is curved as indicated at 39. The folded over portion 31 terminates in a forwardly projecting portion which is referred to herein as a sealing strip 40.

Reference to Fig. 3 shows that the space behind the bent portion 35 accommodates the curved portion 38, and the resilience of the folded over portion 37 causes the sealing strip 40 to be urged against the flange 25' of the bath-tub 24'.

The finishing strip 30 is provided with nail holes 41, and is mounted on the wall in a manner similar to finishing strip 10; that is, it is nailed to the backing strip 32' by means of nails 23'. This is preferably accomplished after the bath tub has been set in place, this finishing strip 30 being pushed downwardly against the resilience of the folded over portion 37 so that it contacts the fold line 36 which acts as a bearing point to insure a good pressure between the sealing strip 40 and the flange 25'. After the bath-tub 24' settles, the resilience of the folded over portion 31 will cause the sealing strip 40 to remain in contact with the flange 25' so as to prevent the entry of water between the two.

The finishing strip 30 is preferably made of a strip of comparatively thin gauge corrosion resisting metal having good spring properties such as a nickel chromium steel alloy.

A still further modification is shown in Fig. 5 in which the finishing strip 42 is a composite strip made up of two members 43 and 44. The member 43 includes the vertical portion 41 and the edge 48, and the member 44 includes the plaster lock 45 and a depending portion 46 which partially closes the gap between the edge 48 and the bathtub flange 25'.

The two members 43 and 44 may preferably be welded together as indicated at 49. One advantage of this construction is that although both of the members 43 and 44 are made of suitable non-rusting metal, the member 43 may be of a less costly metal, and the member 44 may be provided with an ornamental plating which serves as a border around the bathtub. Although a crack will open up between the depending portion 46 and the bathtub flange 25'' as the latter settles, it will be seen that the depending portion will still serve as a partial barrier to the entry of water in any great amounts into the space between edge 48 and the bathtub 25''. If any water does enter into this space, it will be drained back into the bathtub. This space is sufficiently large so that there will be no capillary effect which tends to retain the water. Furthermore, water splashed on the plaster wall surface 21'' as it runs down edge 48 will wash into the crack due to the presence of the depending portion 46 which carries the water well below the lower surface of the edge 48.

Although my invention has been shown as being applied to a plaster wall embodying wooden
laths, it will be understood that the invention may be applied to a wall embodying metal laths as well.

I have found it preferable to employ a plaster lock such as that shown in Fig. 1; namely, one wherein the apertures are trianually shaped with their bases parallel to the line of intersection of the diagonally disposed portion 15 and the edge portion 14. For instance, this spacing can be one-eighth of an inch or less for best results.

Fig. 6 is a horizontal section, the central portion being broken, through a wall 59 at a doorway or other opening, and illustrates another application of the finishing strip shown in Fig. 1. In this instance, two finishing strips 51 and 52 are nailed to the studding 53 or other support which forms one edge of a doorway. The plaster is disposed in the manner of the reference numerals 64 and 55, and is applied to laths 58 and 57 nailed to the studding 53.

Fig. 7 is a vertical section through a wall showing a still further application of the finishing strip of Fig. 1 in connection with a baseboard 58. A finishing strip 59 is mounted just above the baseboard 58 and is nailed to a backing strip 60. The advantages of this construction are that the plaster 61 is flush with the baseboard, and due to the non-overflowing construction, a considerable amount of plaster is saved.

Fig. 8 is a horizontal section through a wall at a point where a door or window casing 51a is inserted in the wall. The casing 62 includes a frame member 62 which is shown as being set beneath the surface of the plaster 63. The finishing strip 64 is a modification of that shown in Fig. 1 in that it is provided with an offset portion 65, forming a recess in which the frame member 62 may be received. In both Figs. 6 and 8, the exposed corners of the plaster are protected by a finishing strip which embodies a plaster lock.

Although I have shown only preferred embodiments of my invention, it will be understood that various changes and modifications may be made therein without departing from the spirit thereof. The foregoing description and the drawings are illustrative only, and my invention is to be limited only by the appended claims.

I claim:

1. An article of manufacture comprising a resilient metal strip folded longitudinally into four continuous longitudinal portions which are connected to each other by folds along their side edges, each of said first and second portions being substantially planar, the second and third portions being disposed substantially perpendicular to each other, the first portion being disposed at an acute angle to said second portion and extending toward said third portion, and being of a width less than the width of said second portion, and said fourth portion being folded back over said third portion and in contact therewith, and being of a width greater than the width of said third portion, said fourth portion being bent forwardly in a curve of a comparatively large radius with respect to the radius of said folds, the marginal part of said fourth portion being disposed substantially parallel to and beneath said second portion and in proximity thereto by the flexing of said fourth portion, thereby permitting said marginal portion to bear against a surface spaced from and disposed substantially parallel to said second portion to form a seal.

2. An article of manufacture as set forth in claim 1, wherein the lower part of said third portion is bent forwardly to permit said fourth portion to assume a radius of curvature sufficiently great so that it will not be flexed beyond its elastic limit when it is flexed so that said marginal part is closely spaced from the surface of said second portion.

3. A sealing strip for sealing the joint between a plaster wall structure and a bathtub flange comprising a single strip of resilient metal folded longitudinally to provide three parallel folds, said strip having first, second, and third portions continuous longitudinal portions connected to each other by said folds, said second portion being substantially planar, said third portion extending from the fold along one side of said second portion and being disposed substantially perpendicular to said second portion, said first portion extending from the fold on the opposite side of said second portion and extending backwardly toward said third portion, the marginal edge of said first portion being spaced from said third portion, and said fourth portion extending from the fold of said third portion in a downward direction and being bent forwardly underneath said second portion, the bent part of said fourth portion being bent in a comparatively large radius and being adapted to resiliently bear against said bathtub flange to form a seal.

GIDEON R. DANIELSON.

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